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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/841,159	04/23/2001	Yacov Yacobi	MS1-777US	4122
22801	7590	11/19/2004	EXAMINER	
LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201			LANIER, BENJAMIN E	
			ART UNIT	PAPER NUMBER
			2132	

DATE MAILED: 11/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/841,159

Applicant(s)

YACOBI ET AL.

Examiner

Benjamin E Lanier

Art Unit

2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-72 is/are pending in the application.
- 4a) Of the above claim(s) 18-55,62-69,71 and 72 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14,16,17,56-61 and 70 is/are rejected.
- 7) ☒ Claim(s) 2-10,12-15 and 57-61 is/are objected to.
- 8) ☒ Claim(s) 18-55,62-69,71 and 72 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-17, 56-61, 70, drawn to a method for protecting a digital good, classified in class 713, subclass 176.
 - II. Claims 18-28, 72, drawn to a first method for facilitating digital good protection, classified in class 713, subclass 189.
 - III. Claims 29-35, drawn to a second method for facilitating digital good protection, classified in class 713, subclass 193.
 - IV. Claims 36-42, 62-65, 71, drawn to a method for detecting digital watermarks, classified in class 713, subclass 176.
 - V. Claims 43-48, 66-69, drawn to a method of determining whether a suspect image is a copy of an original image, classified in class 713, subclass 189.
 - VI. Claims 49-55, drawn to a method of tracking digital goods, classified in class 713, subclass 189.
2. The inventions are distinct, each from the other because of the following reasons:

Inventions I-VI are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I has separate utility such as embedding a watermark into a digital good. Invention II has separate utility of a marker to configure watermarking positions in the digital good. Invention III has separate utility of segmenting the digital good. Invention IV has separate utility of determining whether a digital watermark is present. Invention V has separate utility of determining whether a

Art Unit: 2132

suspect image is a copy of the original. Invention VI has separate utility of tracking the digital goods. See MPEP § 806.05(d).

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II-VI, restriction for examination purposes as indicated is proper.

5. Because these inventions are distinct for the reasons given above and the search required for Group II is not required for Group I, III-VI, restriction for examination purposes as indicated is proper.

6. Because these inventions are distinct for the reasons given above and the search required for Group III is not required for Group I, II, IV-VI, restriction for examination purposes as indicated is proper.

7. Because these inventions are distinct for the reasons given above and the search required for Group IV is not required for Group I-III, V, VI, restriction for examination purposes as indicated is proper.

8. Because these inventions are distinct for the reasons given above and the search required for Group V is not required for Group I-IV, VI, restriction for examination purposes as indicated is proper.

9. Because these inventions are distinct for the reasons given above and the search required for Group VI is not required for Group I-V, restriction for examination purposes as indicated is proper.

Art Unit: 2132

10. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

11. During a telephone conversation with Kasey Christie on 29 October 2004 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-17, 56-61, 70. Affirmation of this election must be made by applicant in replying to this Office action. Claims 18-55, 62-69, 71, 72 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

12. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Objections

13. Claims 2-10, 12-15, 57-61 objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The claims contain all wherein clauses which provide only results and add no further structure to the claimed limitations.

Claim Rejections - 35 USC § 112

Art Unit: 2132

14. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

15. Claims 5, 6, 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

16. Claims 5, 6 recite the limitation "the amalgamation" in line 1. There is insufficient antecedent basis for this limitation in the claim.

17. Claim 11 recites the limitation "the obtaining" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

18. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

19. Claims 1-11, 13-17, 56-61, 70 are rejected under 35 U.S.C. 102(e) as being anticipated by Alattar, US 2002/0009208. Referring to claims 1, 3-6, 8, 16, 17, 56-59, 70, Alattar discloses digital watermark authentication method wherein the watermarking message is combined in one of a variety of ways (Page 6, [0082]) with a random carrier signal to create a key for the embedding of the watermark message into the host signal (Page 6, [0077]-[0082]), which meets the limitation of generating a fingerprint, the

Art Unit: 2132

fingerprint being associated with a watermark, producing a pseudorandom watermark carrier that is independent of the watermark, combining or amalgamating the carrier and the watermark to generate the fingerprint, a marker configured to embedded the watermark into a digital good, and embedding the watermark into a digital good without embedding the fingerprint.

Referring to claim 2, Alattar discloses that a hash can be generated from the image (Page 21, [0267]), which meets the limitation of producing a short fingerprint which is approximately equivalent to the fingerprint and is substantially smaller in scale than the fingerprint.

Referring to claims 7, 9, 10, 60, Alattar discloses that the watermark key can include user or owner specific information (Page 20, [0244]), which meets the limitation of the fingerprint is associated with a detection entity, and the fingerprint is uniquely associated with the watermark or the detection entity.

Referring to claim 11, Alattar discloses that the watermarking system can watermark video signals on a frame by frame basis (Page 11, [0141]), which meets the limitation of segmenting the digital good into multiple segments, repeating the obtaining, generating, and embedding for individual segments of the multiple segments, so that a segment has a segment-associated watermark embedded therein and a segment-associated fingerprint is associated with such segment-associated watermark.

Referring to claims 13, 61, Alattar discloses that the media could be images, audio, and video signals (Page 1, [0003]).

Referring to claim 14, Alattar discloses that watermarking functions are linear (Page 4, [0061]).

Art Unit: 2132

Referring to claim 15, Alattar discloses that the watermark detection process uses log base 10 calculations.

Claim Rejections - 35 USC § 103

20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

21. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

22. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Alattar, US 2002/0009208, in view of Zhao, U.S. Patent No. 6,243,480. Referring to claim 12, Alattar discloses digital watermark authentication method wherein the watermarking message is combined in one of a variety of ways (Page 6, [0082]) with a random carrier signal to create a key for the embedding of the watermark message (Page 6, [0077]-[0082]), which meets the limitation of generating a fingerprint, the fingerprint being associated with a watermark, producing a pseudorandom watermark carrier that is independent of the watermark, combining or amalgamating the carrier and the watermark to generate the fingerprint. Alattar does not disclose that the fingerprints are associated

Art Unit: 2132

with one or more detection entities. Zhao discloses a digital authentication system wherein when a user requests access to a digital document that user's identification is associated with the watermark embedded into the digital document distributed to the user (Col. 2, lines 20-59). It would have been obvious to one of ordinary skill in the art at the time the invention was made to trace illegal copies of digital documents back to the authorized user who originally received the document (Col. 3, lines 9-17).

Conclusion

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin E Lanier whose telephone number is 571-272-3805. The examiner can normally be reached on M-Th 7:30am-5:00pm, F 7:30am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Benjamin E. Lanier



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